

Swansea Rural District Council.

ANNUAL REPORT

ON THE

Llandilo-Talybont Division.

FOR THE YEAR 1902,

BY THE

Medical Officer of Health,
TRAFFORD MITCHELL, M.D., D.P.H.

SWANSEA :

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THE SWANSEA RURAL DISTRICT COUNCIL.

GENTLEMEN,

I beg to submit my Annual Report on the health and sanitary condition of the Llandilo-Talybont Division for the year 1902.

Alteration of Name of District.

In 1894 the Swansea Rural Sanitary Authority became extinct, and the Llangyfelach Rural District Council took its place, the distinguishing title of the new body being taken from a petty village with a few score inhabitants. Fortunately, your Council at length grew tired of the misleading appellation, and have returned to the older and more descriptive title, so that since October, 1902, the District has been known as the Swansea Rural District.

Area.

The Llandilo-Talybont Division contains 21,313 acres, and comprises the five parishes of Llandilo-Talybont, Penderry, Cockett, Loughor Borough, and Gowerton. As in former reports, the old divisions of Cockett parish, viz.:—Swansea Higher and Swansea Lower, are retained in the various Tables.

Population.

In 1901, the decennial census was taken on 31st March, and I adopted the census figures as representing the mid-year population with sufficient accuracy for all practical purposes, though a small number ought to have been added as the estimated increase during the second quarter of the year. In the present report, therefore, allowance must be made for fifteen months' increase, viz.:—from 31st March, 1901, to 30th June, 1902, and

judging by the increase observed during the last intercensal period, an addition of 298 must be made, so that my estimate of the population of the division at mid-year is 20,090. So far as careful observation of the district shows, Cockett seems to be as in the previous ten years stationary, whilst the rate of increase seems to be unaltered in Gowerton, diminished in Penderry, and increased in Llandilo-Talybont and Loughor. The estimated populations of the various sub-districts at the end of June were as follows :—Llandilo-Talybont, 6190; Penderry, 2900; Swansea Higher, 4100; Swansea Lower, 2020; Loughor Borough, 2630; Gowerton, 2250.

The density of the population varies from 0·5 persons per acre in Penderry to 1·8 in Loughor, the average for the whole division being 0·94. Most of the population live in villages of considerable size.

Industries.

The chief industries are coal mining, tinplate and steel manufacture, and the works situated in this division include 22 collieries, 7 tinplate works, 3 steel works, 7 engineering works, 5 brick works, 3 woollen factories, 3 flour mills, 2 saw mills, 2 aerated water works, and 2 chemical works.

One large colliery was idle during the greater part of 1902, and strikes affected two others, but on the whole the industrial condition of the Llandilo-Talybont Division during the year was very satisfactory.

Births.

Six hundred and forty-six births were registered during 1902, as compared with 678 in 1901, 587 in 1900, and 603 in 1899. The average number of births registered in the ten years 1892—1901 was 649, or three more than the number registered in 1902.

The birth rate in 1902 was 32·2 per 1000, which compares favourably with the low rate of 28·6 per 1000 recorded in England and Wales in 1902, but falls 2·1 per 1000 below the average rate recorded in the Llandilo-Talybont Division in the ten years 1892—1901.

The following are the birth rates for the sub-districts in 1902:—Llandilo-Talybont, 33·4; Pendererry, 28·6; Swansea Higher, 31·7; Swansea Lower, 26·7; Loughor Borough, 35·7; Gowerton, 34·7.

As compared with the average birth rates for the ten years 1892—1901, all the sub-districts except Gowerton showed a decrease. In Gowerton there was a rise of 0·9 per 1000, but Llandilo-Talybont showed a decrease of 0·8, Swansea Lower 1·7, and Loughor Borough 2·4; whilst there was a marked fall in Pendererry of 5·2, and in Swansea Higher of 4·1.

The various details as to births and birth rates are given in Tables I., XI., and XII.

Of the 646 births registered, 339 were those of males and 307 those of females, being in the proportion of 1104 males to 1000 females, the usual proportion for England and Wales being 1036 males to 1000 females.

The illegitimate births numbered 7 males and 10 females, a proportion of 26·3 per 1000 registered births, or less than two-thirds of the average rate for England and Wales.

TABLE I—Showing the Number of Births Registered in the year 1902, and the Birth Rates since 1892.

Name of Area.	No. of Births.			Illegitimate.		Birth Rate per 1,000 of Population.												Mean Rate 1892-1901.	1902
	Males.	Females	Total.	Males.	Females.	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901				
Parish of Llandilo- Talybont	100	107	207	3	4	35.0	35.3	38.1	42.0	34.5	30.3	32.0	30.9	27.9	37.2	34.2	33.4		
Parish of Penderry	44	39	83	2	3	37.1	36.0	38.5	36.6	38.5	34.1	26.2	31.4	26.9	32.6	33.8	28.6		
Swansea Higher	72	58	130	1	—	41.4	49.8	34.9	38.5	32.2	35.6	31.7	29.8	28.3	36.3	35.8	31.7		
Swansea Lower.....	28	26	54	1	—	32.7	34.1	28.8	26.8	23.9	28.4	29.9	24.6	29.6	25.7	28.4	26.7		
Loughor Borough	55	39	94	—	—	36.5	39.8	39.4	35.0	41.7	37.6	34.3	39.8	37.8	38.9	38.1	35.7		
Parish of Gowerton	40	38	78	—	3	43.8	32.9	38.2	31.8	38.7	31.9	30.3	29.7	33.7	27.3	33.8	34.7		
Llandilo-Talybont Division	339	307	646	7	10	37.2	38.8	36.6	36.7	34.8	32.9	31.5	31.1	29.9	34.3	34.3	32.2		
England and Wales						30.5	30.7	29.6	30.2	29.6	29.5	29.3	29.1	28.7	28.5	29.6	28.6		

The statistics for Loughor and Gowerton, 1892-94, are included in the above rates for the Division.

Deaths.

The deaths registered in the Llandilo-Talybont Division during 1902 numbered 299, which differs little from the average number, 294, registered in the preceding ten years. To this number must be added 10 deaths of residents of this division which occurred in hospitals, workhouses or asylums, so that the nett number of deaths in 1902 was 309.

The uncorrected death rate was 14·9, and the nett death rate 15·4 per 1000, as compared with 15·5 and 15·8 respectively in the preceding 10 years. The death rate for England and Wales in 1902 was 16·3 per 1,000, the lowest rate on record.

The death rates for the sub-districts were as follows:—Llandilo-Talybont, 17·1; Penderry, 15·5; Swansea Higher, 17·1; Swansea Lower, 14·8; Loughor Borough, 13·8; Gowerton, 9·8. The following were the average death rates of the sub-districts during the preceding 10 years, Llandilo-Talybont, 16·2; Penderry, 15·5; Swansea Higher, 16·5; Swansea Lower, 13·8; Loughor Borough, 16·6; Gowerton, 15·0. The rate for Gowerton in 1902 was exceptionally low.

The zymotic death rate was very low being only 0·85 per 1000, as compared with 1·64 in England and Wales in 1902, and is much below the average rate of 1·40 recorded in this division during the 10 years 1892—1901. The zymotic death rate was made up as follows:—small pox, 0·05; measles, 0·00; scarlet fever, 0·15; diphtheria, 0·05; whooping cough, 0·30; typhus fever, 0·00; typhoid fever, 0·20; simple and ill-defined fever, 0·00; diarrhoea and dysentery, 0·10. Each of the zymotic rates is satisfactory except those from small pox and typhoid fever. No death from small pox occurred in this division for many years previously; the fatal case was that of an elderly man, who had never been vaccinated, and who contracted the disease in a most virulent form. The typhoid death rate would not have been above the average but for the fact that one of the previous year's patients died on 4th January. The zymotic death rate in the Parishes of Loughor Borough and Gowerton was nil.

Phthisis caused 34 deaths, giving a rate of 1·69 per 1000, which is considerably higher than the average rate of 1·49 recorded in the preceding decennium. The phthisis death rate was excessive in every sub-district except Gowerton and Swansea Lower, the rate in the former being only 0·44, and in the latter 0·49. (See Table VI.)

The deaths from tubercular disease other than phthisis numbered 11, equal to a rate of 0·55 per 1000, so that the total deaths from tuberculosis in 1902 were 45, giving a rate of 2·24 per 1000, or a little more than one-seventh part of the total death rate from all causes.

The rate of mortality amongst children under one year of age was very low, being only 124 per 1000 registered births, as compared with the average rate of 141 recorded in the preceding 10 years, and the rate of 133 recorded in England and Wales in 1902. (See Table VII.) The infant death rate was only 64 in Gowerton, and 74 in Swansea Lower and Loughor Borough. In Penderry the rate stood at the high figure of 205, though not one of the deaths was due to zymotic disease.

The death rate from diseases of the respiratory system was low, being only 2·2 per 1,000.

Of the total deaths in 1902, 80 or 25·9 per cent. occurred amongst children under one year of age, and 99 or 32·0 per cent. occurred amongst children under five. Three deaths occurred at the age of 91 years. The average age at death was 31 years 11 months, and the figures for the sub-districts were as follows: -Llandilo-Talybont, 28 years 8 months; Penderry, 26 years 2 months; Swansea Higher, 31 years 9 months; Swansea Lower, 43 years 4 months; Loughor Borough, 36 years 11 months; Gowerton, 35 years 6 months.

Of the 309 deaths, 161 were those of males and 148 those of females.

Inquests were held in 25 cases, or 8·1 per cent. of the whole, the proportion in England and Wales being 6·7 per cent.

Fatal accidents were more numerous than usual, and produced a death rate of 0·85 per 1,000.

In 2 cases or 0·6 per cent. of the total deaths, the cause of death was not certified by either medical practitioners or coroners, a proportion which bears favourable comparison with that of England and Wales, viz., 1·8 per cent.

TABLE II.—Shewing the Nett Death Rates since 1892.

Name of Locality.	Death Rate per 1,000 of Population.											
	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	Mean Rate 1892-1901	1902
Parish of Llandilo- Talybont	15.3	20.5	17.4	17.4	16.0	14.5	19.7	14.0	14.3	13.5	16.2	17.1
Parish of Penderry	15.1	16.9	20.5	17.4	14.1	15.9	12.4	12.7	17.3	12.8	15.5	15.5
Swansea Higher	15.7	20.7	17.6	18.0	12.9	17.6	11.2	17.6	16.6	16.8	16.5	17.1
Swansea Lower.....	14.1	18.5	16.6	9.3	11.2	7.8	14.7	15.8	10.8	19.3	13.8	14.8
Loughor Borough.....	12.3	20.4	12.2	21.7	13.9	22.6	15.5	14.3	18.1	14.9	16.6	13.8
Parish of Gowerton.....	18.9	16.5	17.8	13.2	15.9	13.6	11.8	15.3	12.1	14.7	15.0	9.8
Llandilo-Talybont Division	15.3	19.3	17.3	16.7	14.3	15.5	14.8	14.9	15.1	15.0	15.8	15.4
England and Wales.....	19.0	19.1	16.5	18.7	17.0	17.4	17.5	18.2	18.2	16.9	17.9	16.3

The Statistics for Loughor Borough and Gowerton 1892-94 are included in the above rates for the Division.

TABLE III.—Showing the number of Deaths from each of the Principal Zymotic Diseases in the Llandilo-Talybont Division in 1902, and the 10 years preceding.

	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902
Small Pox ..	—	—	—	—	—	—	—	—	—	—	1
Measles ..	2	27	1	1	1	4	21	1	4	2	—
Scarlet Fever ..	7	5	2	2	—	4	—	—	3	—	3
Diphtheria ..	3	4	3	1	—	1	10	8	4	8	1
Whooping Cough ..	8	7	14	1	4	4	9	10	10	4	6
Typhus Fever ..	—	—	—	—	—	—	—	—	—	—	—
Enteric or Typhoid Fever ..	3	2	2	4	5	3	1	5	1	4	4
Simple and Ill-defined Fever..	—	—	—	—	—	—	—	—	—	1	—
Diarrhoea and Dysentery ..	1	8	2	4	2	—	3	4	2	8	2
Total Deaths from the principal Zymotic Diseases ..	24	53	24	13	12	16	44	28	24	27	17
Death Rate from the principal Zymotic Diseases } per 1000 of the population.. .. }	1.34	2.91	1.30	0.69	0.63	0.84	2.29	1.44	1.22	1.36	0.85

The deaths registered in Loughor and Gowerton 1892--94 are included in the above Table.

TABLE IV.—Showing the Death Rates from each of the Principal Zymotic Diseases in 1922
per 1000 of Population.

Name of Disease.	Parish of Llandilo- Talybont.	Parish of Penderry.	Swansea Higher.	Swansea Lower.	Loughor. Borough.	Parish of Gowerton.	Llandilo- Talybont. Division.	England and Wales.
Small Pox ..	0·16	—	—	—	—	—	0·05	0·08
Measles ..	—	—	—	—	—	—	—	0·38
Scarlet Fever ..	0·32	0·34	—	—	—	—	0·15	0·15
Diphtheria ..	—	—	0·24	—	—	—	0·05	0·23
Whooping Cough ..	0·97	—	—	—	—	—	0·30	0·29
Typhus Fever.. ..	—	—	—	—	—	—	—	0·13
Enteric or Typhoid Fever.	0·16	0·34	0·49	—	—	—	0·20	
Simple & ill-defined Fever	—	—	—	—	—	—	—	
Diarrhoea and Dysentery ..	0·16	—	—	0·49	—	—	0·10	0·38
TOTALS...	1·78	0·69	0·73	0·73	—	—	0·85	1·64

TABLE V.—Showing the Mean Annual Death Rates from each of the Principal Zymotic Diseases,
1892—1901, per 1000 of population,

Name of Disease.	Parish of Llandilo- Talybont.	Parish of Penderry.	Swansea Higher.	Swansea Lower.	Loughor Borough.	Parish of Gowerton.	Llandilo- Talybont. Division.	England and Wales.
Small Pox ..	—	—	—	—	—	—	—	0·013
Measles ..	0·39	0·31	0·54	0·15	0·30	0·14	0·34	0·41
Scarlet Fever ..	0·11	0·21	0·10	0·05	0·14	0·13	0·12	0·16
Diphtheria ..	0·09	0·07	0·49	0·44	0·08	0·14	0·22	0·27
Whooping Cough ..	0·35	0·28	0·44	0·49	0·37	0·37	0·32	0·39
Typhus Fever ..	—	—	—	—	—	—	—	0·002
Enteric or Typhoid Fever	0·17	0·04	0·25	—	0·13	0·27	0·158	0·17
Simple & Ill-defined Fever	0·02	—	—	—	—	—	0·005	0·006
Diarrhoea and Dysentery	0·22	0·14	0·17	0·49	—	0·05	0·18	0·70
TOTALS ..	1·35	1·05	1·98	1·62	1·02	1·10	1·40	2·13

TABLE VI.—Showing the Number of Deaths from Phthisis during 1902, and the Death Rates since 1892.

Name of Locality.	Number of Deaths in 1902.	Death Rate per 1000 of Population.											
		1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	Mean Rate 1892-1901	1902
Parish of Llandilo-Talybont	10	2.10	1.62	1.96	2.48	2.05	2.02	2.50	0.52	1.19	1.50	1.78	1.62
Parish of Penderry	5	2.21	0.31	2.47	1.39	0.69	1.38	1.38	—	1.04	0.69	1.16	1.72
Swansea Higher	10	1.47	1.95	1.71	1.71	1.22	1.22	0.49	1.95	2.19	1.95	1.59	2.44
Swansea Lower	1	0.49	0.98	0.49	1.46	0.49	1.47	1.47	0.49	0.49	0.99	0.88	0.49
Loughor Borough	7	0.47	1.39	2.71	3.10	1.30	1.71	1.26	0.82	0.40	2.36	1.55	2.66
Parish of Gowerton	1	2.30	1.37	3.19	1.36	1.82	1.82	—	0.45	0.90	1.79	1.50	0.44
Llandilo-Talybont Division	34	1.62	1.37	2.06	1.98	1.37	1.63	1.35	0.77	1.17	1.57	1.49	1.69
England and Wales		1.47	1.47	1.39	1.40	1.307	1.34	1.317	1.336	1.332			

The Statistics for Loughor and Gowerton 1892—94 are included in the above rates for the Division.

TABLE VII.—Infant Mortality

Name of Locality.	Deaths of Children under 1 year of age per 1,000 Registered Births.											
	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	Mean Rate 1892-1901	1902
Parish of Llandilo-Talybont	152	224	149	155	189	182	190	130	159	112	163	163
Parish of Penderry	138	200	165	229	116	111	105	176	179	106	153	205
Swansea Higher	106	151	202	164	76	130	100	172	164	121	139	100
Swansea Lower.....	89	128	84	73	122	—	82	200	100	173	103	74
Loughor Borough.....	117	174	92	203	94	205	146	103	149	111	138	74
Parish of Gowerton	74	125	155	100	129	71	104	182	52	115	110	64
Llandilo-Talybont Division	117	174	151	161	127	133	134	153	141	118	141	124
England and Wales	148	159	137	161	148	156	161	163	154	151	154	133

The statistics for Loughor Borough and Gowerton 1892—94 are included in the above rates for the Division.

Vaccination.

Through the kindness of Messrs. John White, D. R. Davies, and David Jones, the Vaccination Officers of the Llandilo-Talybont, Swansea, and Llanelly Districts respectively, I am enabled to give the following statistics :—

Of 678 children whose births were registered in the Llandilo-Talybont Division in 1901, 595 have been successfully vaccinated, 71 died unvaccinated, none have been exempted under the Conscience Clause, 3 have their vaccination still postponed by medical certificate, and none have removed to places known, but 9 to places unknown. Thus the number not finally accounted for on 1st January, 1903, is only 12 out of 678, or a percentage of 1·8, which contrasts strongly with the high rates recorded elsewhere, and reflects great credit on the energy of the local vaccination officers.

Re-Vaccination.

In consequence of the serious outbreak of Small-Pox in Swansea, the Guardians of the Swansea Union, at the beginning of 1902, opened temporary vaccination stations throughout their district for a few weeks so as to afford facilities for re-vaccination. This was not so successful a proceeding as had been anticipated, and in July, when the outbreak was at its worst, the Guardians appointed a large number of temporary Public Vaccinators to go from house to house and offer re-vaccination to all over the age of 10, and also opened a large number of temporary vaccination stations. It is impossible to give any statistics as to the number of revaccinations in the Llandilo-Talybont Division, as many took place privately, but the number was certainly large. Amongst my own patients, over one thousand were re-vaccinated either publicly or privately.

It is full time that systematic revaccination should take the place of those panic re-vaccinations with which this Country has lately become so familiar, and it is clearly the duty of the Government to introduce a Bill making re-vaccination compulsory for every child on attaining the age of twelve years. My

own limited experience as a temporary Public Vaccinator was that almost all school children between the ages of 10 and 14 were anxious to be re-vaccinated, and I found great difficulty in getting rid of children under 10 years of age who wished to be in the fashion. The constitutional disturbance in children between 10 and 14 was as a rule very much less than in adults, and, if re-vaccination is to be performed at all, it ought to be performed about the end of school life instead of later on, when the individual is probably compelled to earn a livelihood by severe toil, and cannot afford to be temporarily disabled for work by the effects of re-vaccination. Under the Factory and Workshop Acts children and young persons who are to be employed in Factories must obtain certificates of fitness from the Certifying Factory Surgeon, and it ought to be made a legal condition of their employment that they should produce certificates of re-vaccination also.

Men who have thoroughly and impartially studied the history of smallpox outbreaks in this and other countries, entertain no doubt as to the great value of vaccination and re-vaccination in the prevention of smallpox, accompanied, of course, by prompt and thorough isolation of all smallpox patients. Whatever diversity of opinion may exist as to the practicability of universal compulsory re-vaccination, there can be no doubt as to the necessity for arming every medical officer of health with powers for the compulsory re-vaccination of all persons who have been in contact with smallpox patients. Fortunately I experienced no difficulty in securing the re-vaccination of all "contacts" in my own district; but in most districts it has been found impossible to persuade a certain proportion of the "contacts" to submit to re-vaccination, and the results have been frequently most serious. The utter selfishness and callous indifference of the individual ought not to be permitted to endanger the public weal, and the necessary legislation ought to be introduced at once.

Infectious Disease (Notification) Act, 1889.

Under the provisions of the above Act, the following cases were notified during 1902:—Smallpox, 3; diphtheria, 12;

scarlet fever, 176; typhoid fever, 12; puerperal fever, 5; erysipelas, 9; total, 217, as compared with 341 in 1901, 196 in 1900, 190 in 1899, 137 in 1898, and 212 in 1897. No notifications were received during the last six weeks of 1902.

Small-Pox.

As indicated in an earlier section of this report, Small-Pox invaded Swansea at the beginning of 1902, and continued to prevail more or less until November.

On 9th July, one case of Small-Pox was notified to me in Llewellyn Villa, Sketty; on 12th July, one case in Roseland Terrace, Sketty; and on 13th July, one case at Bank-y-Whit, Pontardulais. All three cases occurred within the space of a few days; the infection was imported from Swansea by three different channels; and the number of contacts was over 60; yet so vigorous were the measures taken by your officers, and so prompt the re-vaccination of all who had been in contact with the patients, that not one of those three cases was followed by any other. And though no Sanitary Authority could be served more loyally, promptly and thoroughly by its officers than you have been, I am certain that no Sanitary Authority could possibly have given more prompt assistance to its officers in their efforts to cope with the disease than you did, and I feel personally that I owe a deep debt of gratitude to your Council for the cheerful spirit in which you endorsed all those measures which I considered it necessary to recommend, and for the moral support which you afforded to me. Not only did you erect a Small-Pox Hospital to meet the emergency, but you also gave me a free hand to arrange for isolation of patients in the hospitals of neighbouring districts; you redeemed the promise I had given for the payment of wages to those of the contacts whom I did not consider it safe to allow to quit the infected houses; you granted me a fully qualified temporary assistant inspector to cope with the extra work; and, in the absence of means of disinfection, owing to the resources of Swansea Hospital being overtaxed, you promptly gave me permission to order the destruction of bedding and clothing by burning.

As I presented three special reports last July, one on each of the three cases, I need not here go into details, but merely mention the outstanding features.

The first patient's residence was only a few yards outside the boundary of Swansea Borough, and he himself was employed as a goods porter at a railway station in Swansea town, from which one of the other employees had shortly before been removed to hospital. The patient's medical attendant was Dr. Knight, one of the physicians to the Swansea General Hospital, and he immediately recognised the nature of the case, and at once proceeded to inform the Swansea Medical Officer of Health. The latter realised that the case was just outside his district, and telegraphed to me for my permission for the removal of the patient to Swansea Fever Hospital. In the meantime a relative of the patient had telegraphed to me, in Dr. Knight's name, asking me to arrange for the patient's removal to hospital, so that I was on my way to Sketty before the Swansea M.O.H.'s telegram arrived. I found that the patient's mother and sisters were anxious to obtain the opinion of another medical man, in addition to that of their own medical attendant, before allowing the patient to go to hospital, and had, as a matter of fact, already sent for two doctors, but they were both from home. Recognising that persuasion would be much better than coercion, I offered to send my inspector for the Medical Officer of the Swansea Hospital, and guaranteed that the Sanitary Authority would pay a consultation fee of one guinea to him. He accordingly very kindly came, and on examining the patient he pronounced him to be suffering from undoubted small-pox. The patient then willingly went to hospital, with the ready consent of his relatives. The wisdom of placing the nature of the case beyond doubt was amply justified by the course of events, for within a day or two some foolish gossips invented and industriously circulated a story that the case was one of chicken pox, and that the patient had been sent home from hospital. As a matter of fact, the patient was several weeks in hospital. Your Council very kindly approved of my calling the Medical Officer of the hospital to examine the patient, and paid his consultation fee. The contacts were very promptly revaccinated.

When the second case (the brother of a Swansea patient) was notified to me on Saturday, 12th July, I telephoned to the Swansea Medical Officer of Health, and requested him to send an ambulance for the removal of the patient to Swansea Fever Hospital in accordance with an agreement which exists between your Council and Swansea County Council, under which patients from your district are admitted to Swansea Fever Hospital, provided there is accommodation available for them. The Swansea Medical Officer of Health replied that he absolutely could not accept the patient, as the Swansea Fever Hospital was already filled beyond its capacity. I asked if that was a final answer, and he said it was. I at once interviewed the chairman of your Finance Committee and then proceeded to Swansea to interview the chairman of your Council, and submitted to him two requests: 1st, that I should be permitted to arrange for the isolation of the patient in any hospital in the neighbouring districts that would accept him; and, 2nd, that a temporary smallpox hospital should be erected on Garngoch Common at a suitable distance from roads and dwellings. The chairman kindly arranged an immediate informal meeting with the vice-chairman of the Council, the chairman of the Sanitary Committee, the clerk, the surveyor, and the assistant surveyor, and a telegram was without delay sent to Messrs. Humphreys Ltd., of London, ordering a temporary hospital of 12 beds to be delivered at once, and the surveyor was ordered to proceed at once with the preparation of the foundations for the same. I was also authorised to make what arrangement I could with neighbouring hospitals, and, after telephoning and telegraphing in vain to Ystalyfera and other hospitals, I at length succeeded, through the great kindness of Dr. Whittington, the Medical Officer of Health for the Neath Rural District, in making arrangements for the admission of the patient to Cimla Hospital early on the following morning (Sunday), but at about 11 p.m. on the Saturday night the patient was removed to Swansea Fever Hospital after all. Dr. Perkins, who was both the public vaccinator and the medical attendant, not only

promptly performed re-vaccination of contacts, but very kindly visited them very regularly. On Sunday morning I telegraphed to Dr. Whittington, thanking him for his great kindness, but stating that the admission of the patient was not then required.

But my rejoicing was unfortunately premature, for shortly after noon on the same day (Sunday) I received a telephone message from Dr. Griffiths, informing me that a severe case of smallpox existed at Bank-y-Whit, Pontardulais. I immediately telephoned to the Swansea Medical Officer of Health, and asked him if he could accommodate this new patient, but he replied unhesitatingly that it was absolutely impossible, as the preceding week had been the most grave in the history of the Swansea outbreak. I then telephoned to Dr. Whittington, asking if he would be kind enough to accept this new patient; he at first said no, as the nurse whom he had engaged for the other patient had arranged to go elsewhere; but, after some pressing, he very kindly consented, and re-engaged the nurse. I at the same time telephoned to Dr. David Griffiths, the Public Vaccinator, to re-vaccinate all the Pontardulais contacts on the same day, as I had ascertained that there had been an exceptionally large number of contacts (about 40), as the patient was a well-known and highly respected man, and many visitors had called on him before the nature of the illness was known. As Dr. Griffiths had not a sufficient supply of lymph, I requested him to send a special messenger on a bicycle to Swansea to fetch sufficient vaccine, and to charge the cost of the special messenger to the Sanitary Authority, as with such a large number of contacts every hour's delay meant danger. I then proceeded to the patient's residence along with the inspector, and investigated the circumstances of the case. The patient was removed to Cimla Hospital in a covered conveyance, and the inspector (Mr. D. R. Thomas) accompanied him to the hospital. This patient, unlike the other two, had never been vaccinated in infancy, and he was almost entirely covered from head to foot with the eruption of smallpox; he, unfortunately, died a few days later. All the contacts were promptly re-vaccinated (including the driver of

the conveyance). The infection in this case was imported from a house in St. Mary Street, Swansea.

I did not consider it safe to permit the inmates of infected houses to follow their employments, or mix with the public, until after the period of incubation had safely passed; and, as I have already stated, your Council very wisely and very kindly paid the wages of those persons during their periods of enforced seclusion.

As already stated, also, the Swansea authorities were too hard pressed themselves to be able to disinfect clothing and bedding for us, so these were burned, with your consent, and compensation was paid.

The Small-pox Hospital was duly erected on Garngoch Common in an ideal spot, and, though fortunately it has not since been required for small-pox in my division, still it was ready long before the appearance of the cases that subsequently occurred in the Llangyfelach division of your district. The cost of provision of a temporary hospital means a very small rate indeed in a district which like yours has a rateable value of over £114,000, but even had the expense been much greater, it would have been completely justified; for it is the duty of every Sanitary Authority to make satisfactory provision for the isolation of cases of dangerous infectious disease; and no one who had practical experience of sanitary work during 1902 would consider the existing agreement with Swansea a satisfactory one, seeing that during the whole of 1902 no other infectious disease than small-pox could be isolated in the Swansea Fever Hospital, and that in July there was not sufficient accommodation for even small-pox.

The work entailed by small-pox was very considerable during the greater part of 1902, for, in addition to the supervision of contacts, many visits of inquiry had to be paid as the result of communications from other districts, and many visits had to be paid to suspicious cases of chicken-pox, at the request of the medical attendants.

Diphtheria.

Twelve cases of diphtheria were notified during the year—7 in Waunarlwydd, 2 in Loughor, and 1 each in Gowerton, Gendros, and Garnswllt. Fortunately, antitoxin was freely used, and only one death resulted, viz., in Waunarlwydd. In one of the Loughor houses, in which diphtheria occurred, a cat suffered from a troublesome cough, and at my recommendation the cat was killed and sent to the County Laboratory for examination; no evidences of diphtheria, however, were found in it.

Scarlet Fever.

One hundred and seventy-six cases of scarlet fever were notified in 1902, distributed over most of the district, viz., 20 cases in Pontardulais, 2 in Pontlliw, 13 in Grovesend, 15 in Penyrheol, 18 in Gorseinon, 10 in Loughor, 12 in Gowerton, 23 in Waunarlwydd, 16 in Ystrad Road, 31 in Forestfach, 12 in Upper Cockett, and 4 in Sketty. Three deaths occurred, one each in Forestfach, Pontlliw, and Pontardulais. The type of the disease, however, was, with those three exceptions, very mild, and I did not consider school closure necessary.

Section 109 of the Factory and Workshop Act, 1901, forbids the making of any wearing apparel in any dwelling house or building occupied therewith, whilst any inmate of the dwelling-house is suffering from scarlet fever, and I had to deal in 1902 with six workshops under this section. As your district has been hitherto dependent on Swansea Borough Fever Hospital for accommodation for infectious cases, and that hospital was reserved for small-pox during the whole of 1902, I was unable to arrange for the removal of any of the patients to hospital, but I had the patients removed with due precautions from four of the workshops to suitable houses elsewhere, so that I was only compelled to close those workshops for a sufficiently long period to permit of disinfection. In the case of the other two workshops, I was, unfortunately, compelled to close for six weeks, as I could not make satisfactory arrangements in regard to them.

Scarlet fever occurred in three dairies during the year, and I found it necessary to stop the sale of milk, as no satisfactory arrangements could be made for the isolation of the patients.

One case of scarlet fever occurred in the Cockett Cottage Homes, where the pauper children of the Swansea Union are boarded. The medical officer, Dr. Perkins, at once called on me in order to make arrangements for isolation, and as Swansea Fever Hospital was reserved for small-pox patients, and the Garngoch Small-pox Hospital was not then available owing to the presence of small-pox in the Llangyfelach division of your district, we decided that the best course would be to clear out one block which had been devoted to patients suffering from Ophthalmia, and to isolate the Scarlet Fever patient there, the ophthalmia cases, of whom there were only three and those almost entirely cured, being accommodated in a suitable room elsewhere. I at once visited the Cottage Homes with Dr. Perkins, and he immediately carried out the plans we had mutually agreed on, and it is highly satisfactory to be able to state that there was no second case.

Typhoid Fever.

Twelve cases of Typhoid Fever were notified during 1902, 5 in Dunvant, 2 in Gowerton, and 1 each in Pontardulais, Penbontnewydd, Gorseinon, Fforestfach, and Waunarlwydd.

The 5 Dunvant cases were simply an extension of an outbreak that occurred in the Gower Rural District portion of Dunvant, and there can be no doubt that dipping wells, into which utensils from infected houses were put, played a considerable part in the spread of the disease. At my suggestion, notices were affixed, warning the public against using water from those wells without previous boiling.

The Pontardulais case occurred in a house of public resort, and very grave defects were found in regard to the system of drainage, effluvia from the soil pipe finding their way into the bedrooms, and your Council gave notice to the owners to remedy the defects.

The Gorseinon case occurred in a row of houses in which typhoid has shown a tendency to recur again and again, the drainage being of a very imperfect description, and unfortunately the patient died. Your Council gave instructions to your surveyor to report on the best method of improving the very defective sewer.

The case in Penbontnewydd Farm proved fatal on the same day as I received the notification, but no definite source of infection was found. The owner of the farm was, however, called upon to take steps to protect the open well there from contamination.

There was no special feature of interest in regard to the other cases.

Several samples of blood from doubtful cases of typhoid were sent to the County Laboratory for examination by Widal's test. The Laboratory has proved a most valuable acquisition, and has amply justified its establishment.

Puerperal Fever.

Five cases of Puerperal Fever were notified during the past year, and one death occurred.

Erysipelas.

Nine cases of Erysipelas were notified during 1902, but no deaths resulted.

Measles.

An outbreak of measles occurred in Pontardulais in November, and I found it necessary to have the Pontardulais National School and the Pontardulais Board School closed for a period of three weeks. Fortunately no deaths occurred.

Whooping Cough.

A large number of cases occurred during the last year, and unfortunately six deaths resulted. As the period of incubation is long, and the patient is capable of communicating infection several days before the occurrence of the characteristic whoop, prevention of the spread of whooping cough is very difficult.

Chicken Pox.

A considerable number of cases came under observation during the past year, as I was on many occasions called in to consult with medical men as to the character of suspicious-looking cases.

Diarrhoea.

The death rate from diarrhoea in 1902 was as usual very low, being only one-fourth of that of England and Wales, a fact which is mainly due to infants being brought up on the breast and carefully tended by their mothers, but probably in part also to the impervious nature of the soil in most portions of the district rendering it less liable to absorb and retain organic pollution.

Fatal cases of diarrhoea occur mostly amongst young children, and mothers should exercise great care to see that children who cannot be reared on the breast should receive suitable food only, that all feeding bottles are absolutely clean, that the food is perfectly fresh and untainted, and that the children are not overfed nor fed too often. It is also important that each house should be provided with a cool clean pantry for the storage of food, and that no foul gases from cesspools, drains or accumulations of filth should have access to the pantry.

Influenza.

A very extensive epidemic of influenza visited the district in November and December, and seven deaths resulted.

Tuberculosis.

As already stated in an earlier section of this report, phthisis last year caused 34 deaths and other forms of Tubercular disease 11, giving a death rate from all Tubercular diseases of 2.24 per 1000.

It seems strange that the legislators of this Country have not yet had the courage to introduce a measure to render compulsory the notification of Tuberculosis or at any rate of its pul-

monary form, for the Tubercular death rate in England and Wales is nearly three times as great as that of all the infectious diseases scheduled under the Infectious Disease Notification Act, 1889. No argument has been advanced against compulsory notification of phthisis that was not in vain advanced against compulsory notification of ordinary infectious disease except 1st, that compulsory notification of phthisis would cause a patient suffering from the very early stages of the disease to acquire the undesirable knowledge that he was suffering from consumption, and 2nd, that because phthisis is a long drawn out disease, and it is not desirable to attempt to prevent consumptives from earning a livelihood, therefore compulsory notification of phthisis ought not to be legalized. Now it seems to me that as the consumptive patient does live for years, and does for years continue to expectorate millions of germs daily, therefore it must be quite as important for the public welfare that the sanitary authority should be satisfied that the patient takes all reasonable precautions against disseminating the disease, as it is in the case of ordinary infectious diseases, where the infection only lasts for a few weeks. Of course it may be urged that phthisis is not so highly infectious as many epidemic diseases, but the same argument as to its not being highly infectious might be used of that dread disease, leprosy, yet men of all past ages felt that compulsory separation of lepers from the healthy members of the community was completely justified. Knowing what we now do of the nature of the tubercular bacillus, we know that it is quite unnecessary to constitute consumptives a class of social outcasts or to hinder them from earning their livelihood, but we also know how easy it is to destroy the tubercular germs outside the human body, and we have a right to demand that sanitary authorities should be invested with power to discover whether the necessary measures to destroy those germs of tubercle are being carried out.

As to the contention that compulsory notification of phthisis would have the undesirable effect of making a patient suffering from the very early stage of phthisis acquainted with the true nature of his disease, and that such information would sound

like a death knell to many, I need only remark that medical practitioners are as a rule men of sound common sense, and that Medical Officers of Health are as a rule not devoid of that useful commodity, and a sensible medical practitioner and a sensible medical officer of health acting together would have no difficulty in arranging that in those few cases where secrecy is desirable, the patient should not learn the tubercular nature of his illness. As stated in my last Annual Report, the method followed in New York would work admirably, viz.:—that the medical attendant should in such cases forward to the medical officer of health a certificate stating that all reasonable precautions were being observed, that no sanitary defects of the premises required to be remedied, and that for valid reasons the medical attendant considered active interference on the part of the sanitary officials undesirable in a particular case, and did not wish the patient to learn that he was tuberculous. But it seems to me that the objection to the patient's acquiring knowledge as to his suffering from tubercular disease must before long lose almost all its force, if the present widely spread belief as to the curability, total or partial, of phthisis proves to be well founded, for if there is a chance of curing the disease, surely that chance must be greater in the early stages than in the later ones, and, if the patient does not realize the danger, he is not likely readily and thoroughly to carry out all the various measures necessary for his cure. However, that is a question which the individual medical attendant must ask himself alone in regard to each individual patient.

At the beginning of 1902 your Council, acting on my recommendation, applied for the Local Government Board's sanction to the inclusion of Tuberculosis of the lungs within the scope of the Infectious Disease Notification Act, 1889, in this District. The Local Government Board, however, declined to sanction the principle of compulsory notification of Phthisis, and stated that voluntary notification might be adopted without the necessity of obtaining the Board's sanction. But whilst compulsory notification is admirably adapted to the requirements

of this District, voluntary notification would in my opinion be quite unsuitable, as voluntary notification would inevitably involve much friction between patients and medical attendants in an industrial district like ours, and early notifications would be the exception and not the rule.

Last year I pointed out that whilst one-eighth of all deaths in England and Wales are due to Tubercular Disease, the death roll is still more serious because of the ages at which phthisis selects its victims, for one-fourth of all deaths between the ages of 5 and 55 are due to phthisis, and nearly half the deaths between the ages of 25 and 35, when life seems best worth living, are due to the same preventible disease. I also pointed out last year that without any special measures having been taken against tuberculosis in particular, the mortality from phthisis has been reduced more than 45 per cent. during the last 40 years, and that such fall must be attributed to the improved conditions under which the people live, such as improved sanitation; drier, better ventilated, and better lighted houses, workshops and factories; drainage of land; and better food and better clothing.

The two most deadly enemies of the tubercular bacillus are sunlight and air, and it is the duty of every sanitary authority to see that all new houses are properly constructed, and that every room is provided with plenty of light and air; that no dark and ill-ventilated passages and staircases are tolerated in new houses; that houses are kept in a clean and wholesome condition; that the house and subsoil drainage are good; that overcrowding is prevented; that efficient ventilation is provided for all schools, workshops, and public halls; and that pollution of air by smoke is reduced to a minimum. Koch's recent arguments have raised some doubts as to the possibility or probability of tuberculosis being conveyed by food, but until his statements have been confirmed by competent independent observers, sanitary authorities ought to continue to exercise thorough supervision over the milk and meat supplies of their districts.

Only one house in the Division was disinfected in 1902 after the death of a tubercular patient.

A few months ago a new Bye-Law of the Glamorgan County Council came into force prohibiting spitting on the floor, side or wall of any public carriage, or of any public hall, waiting room, or place of public entertainment, on penalty of a fine not exceeding £5.

A proposal is now on foot to erect a sanatorium for consumptives, either for Swansea alone or for Swansea and district. Such an institution, if provided, will do a very large amount of good, but its power for good must necessarily be limited by the amount of funds available, for the number of consumptives in Swansea and district must be about 600 or 700, or possibly more, and the sanatorium will, in all probability, only be able to accomodate a very small percentage of that number at one time. However, it is the duty of everyone to wish success to the sanatorium movement, even though it cannot possibly attain the amount of success that some of its advocaes anticipate for it.

Permanent Isolation Hospital.

A site for a permanent isolation hospital was selected at the end of 1901 on Garngoch Common close to Gelligynore, but owing to some difficulty as to acquiring rights to the common it was abandoned. A new and excellent site has now been selected on freehold land a few hundred yards further north, and the owners of the land are willing to dispose of it at a sum to be fixed by arbitration. Valuers have been nominated on both sides, so the sale of the land will doubtless be completed in a very short time. The new site has an excellent exposure ; it is very convenient of access ; situated near a rapidly growing population, within easy reach of a telegraph office, and not far from the telephone wires of the National Telephone Company and the electric cables of the Gorseinon Electric Lighting Company. Dr. Williams, the County Medical Officer, has inspected the new site, and approves of it. The plans for

the hospital on the site on the Common were submitted to Dr. Parsons, Assistant Medical Officer of the Local Government Board, and received his approval, and as the change of site will not involve any material alteration in the plans, there can be little doubt that within a comparatively short time we shall see the permanent hospital erected.

My objections to a site for the hospital being selected at Llangyfelach were fully set out in my last annual report (pages 34-36), and as my views as to the selection of a site have been acted upon, I need not repeat my arguments here again.

The Small-pox Hospital erected in 1902 on Garngoch Common, about a mile from the proposed permanent one, is dealt with in the section on small-pox. Now that small-pox has departed from Swansea, our Small-pox Hospital may be used for other diseases in cases of emergency until the permanent hospital is ready. This hospital has been provided with twelve beds, the usual furniture, and a portable disinfectant.

TABLE VIII.—RAINFALL IN 1902.

At Penllergaer, in the Parish of Penderry.

RAIN GAUGE. { Diameter of Funnel, 5 inches.
 { Height of top { Above ground, 3 ft.
 Above sea level, 240 feet.

Month.	Total Depth.	Greatest Fall in 24 hours.		No. of days on which 0·01 or more fell.
	Inches.	Depth.	Date.	
January	2·54	0·56	26th	16
February	1·28	0·46	23rd	5
March	3·69	0·70	26th	18
April	2·73	0·90	21st	11
May	3·16	0·49	16th	20
June.	4·37	0·92	1st	16
July	2·61	0·91	19th	10
August	2·26	0·42	6th	16
September	2·77	0·50	22nd	12
October	4·53	1·08	13th	18
November	5·28	1·12	27th	19
December	4·05	0·67	15th	19
Total	39·27			180

Average annual rainfall at Penllergaer, 1892-1901, 45·81 ins.

Greatest „ „ „ „ 56·62 in. in 1894

Least „ „ „ „ 36·97 in. in 1892

For the above table I am indebted to the kindness of Sir John T. Dillwyn-Llewelyn, Bart.

TABLE IX.—Supplied by the Surveyor, Mr. T. Trevor Williams, showing the new structural work carried out in the Llandilo-Talybont Division during 1902.

1st.—Small-pox Hospital, with 12 beds, has been erected on Garngoch.

2nd.—111 dwelling-houses, 3 farm houses, 4 shops, 4 workshops, 2 vestries, 1 surgery, and 1 storeroom have been erected during 1902.

3rd.—The sewer at Gowerton has been extended to Gurnos Street and Shaw Street.

Water Supply.

The most unsatisfactory feature of the Llandilo-Talybont Division is the water supply, and this inadequacy has been so often reported on that one feels as if beating the air when referring to the subject again. There is not a single part of my district which possesses a satisfactory supply so far as regards quantity, and though your Council fully recognises the facts, and has from time to time devised various schemes, and also devoted a great amount of attention to the matter during the past year, yet we are as far off as ever from the realisation of our hopes.

I presented an exhaustive report on the subject last year, so that it would be a mere waste of time to repeat it all over again; for the details reference can be made to that report, pages 38-50. Suffice it here to state that the water mains of Gowerton are fed from Cefngoleu Spring, and that the quantity is quite insufficient; that Waunarlwydd, Mynyddbachyglo, Fforestfach, and Cockett receive their water through mains from Cwmllynwyd Springs, and that the yield is quite insufficient and the storage nil; that Loughor derives its supply from a series of wells, and that the supply is neither sufficient nor within a reasonable distance of the houses; that Gorseinon derives its water supply nominally from a few wells, but in reality from two water carts in which your Council brings water from Ffynon-dan-y-cae and Fynnon-gwynangel, and which distribute the water from house to

house; that Pontardulais derives its supply from a few wells sunk in porous soil and liable to pollution, and utterly inadequate in quantity; that the supply in Treboeth and Tirdeunaw by mains from Tank-y-Waun is intermittent, and is so scanty that it is turned off every day from 1 p.m. till the following morning; that Sketty is supplied by mains from Pistyll Gwyn Spring, supplemented by very occasional supplies from Swansea mains, but though the quality is excellent the quantity is totally insufficient; and that Killay and Dunvant mains are supplied from Sketty, but that the quality of the Sketty water by the time it reaches Killay and Dunvant is so much altered that it is unfit for use, and the inhabitants resort to the use of water from various wells.

1902 was, like most of its predecessors, a year of great promise and little fulfilment.

The Graig Fawr Scheme for the supply of Pontardulais and Gorseinon, from which so much was expected, has fallen through for a two-fold reason, firstly it was found impossible to obtain the consent of a certain riparian owner, and secondly the working of coal in the vicinity of the springs threatens to divert the water.

Most portions of this district are situated on the coal measures, so that, if you sink low enough to get a large supply, the water is so much loaded with iron as to be unfit for use, and there is always the danger of mining operations drying up springs. It is quite clear that no satisfactory sources of supply can be obtained within the bounds of your own district, and you have no other course open before you but to avail yourselves of the provisions of Sections 29 and 30 of the Swansea Corporation Waterworks Act, 1892, by which the Swansea Corporation are bound to supply your Council with Cray water, inasmuch as the Swansea mains from Cray pass through your district. Your Clerk (Mr. Edward Harris), has very kindly supplied me with the following information as to the basis on which the charges are to be calculated for water supplied under those sections:—
“The water is to be supplied in bulk for an annual payment

equal to $4\frac{1}{2}$ per cent. upon such proportion of the total expended upon the waterworks as the daily quantity of water supplied to this Council may from time to time bear to the total daily quantity which the works and lines of pipes are capable of providing and conveying, together also with a proportionate part (calculated in the same way) of the cost of upkeep and management."

Your chairman and several other members of your Council, I am glad to say, have taken considerable interest in this question, and I am informed that they have calculated that the cost to your Council on that basis would work out at from $4\frac{1}{2}$ d. to 5d. per 1,000 gallons, a very reasonable sum indeed. I believe nearly all the members of your Council are of opinion that Cray water must prove your ultimate source of supply, but they are by no means agreed as to the time when operations should be commenced with a view to obtaining it. Mr. Wyrill, the Engineer to the Swansea Corporation, considers that the Cray Waterworks will be complete in two years, but that in all probability they will be able to send water down before then. As the laying of water mains, the holding of a Local Government Board inquiry, and so on, will take a considerable time, it is my firm conviction that your Council should at once take action, and that a special committee ought at once to be appointed to formulate a definite scheme, so that the mains should be laid, and ready to receive Cray water as soon as that water becomes available. It has been suggested that, as a junction with Swansea mains already exists in Treboeth, in Sketty, and in Cwmbwrla, the Waunarlwydd and Gowerton mains, which are only a few hundred yards apart, should be connected together, and that from Gowerton the mains should be extended to Gorseinon, throwing off a branch to Loughor at Kingsbridge, and from Gorseinon to Pontardulais via Grovesend and Waungron, and branches could be thrown off to Pontlliw and Penllergaer. Such a scheme would have the merit of taking the mains through a thickly populated area, and would give a network of pipes all over the Llandilo-Talybont Division.

But whatever be the details of the scheme to be adopted, the scheme ought to be formulated without further delay, and no obstacle should be allowed to stand in the way of the scheme becoming an accomplished fact, for the public have long since tired of the countless paper schemes which have been diligently prepared, and then dropped ignominiously.

Drainage and Sewerage.

Drainage is urgently needed in Sketty, Pontardulais, and Gorseinon, and your Council show a sad lack of powers of initiative in regard to this important matter.

The Sketty cesspool system ought to be absolutely condemned, and there is no justification for its continued existence, for the Urban sewer comes within about 600 yards of rural Sketty, and arrangements could easily be made with Swansea County Council to connect a new rural sewer with the borough one. Sketty is the fashionable suburb of Swansea, but its sanitary arrangements are primitive in the extreme.

At Pontardulais slops, etc., are either thrown into the non-tidal Dulais river or deposited in gardens of limited extent, and the condition of the house surroundings is highly insanitary. As the Loughor river is tidal in Pontardulais, there is no real financial or engineering difficulty as to providing a satisfactory system of sewerage.

Gorseinon is the village in your district which approaches most nearly in arrangement of streets to the urban system, yet it is destitute of any system of sewerage, and a most horrible nuisance is the inevitable result of the inhabitants having to throw slops and filthy water on gardens of small size and on the scavengers' back roads. There are a few drains in the village, but they are mere miserable makeshifts. A sewer ought to be constructed without delay, and a committee of your Council ought to be appointed at once to consider whether the sewer ought to be constructed with an outlet into the tidal portion of the river Lliw about a mile distant, as suggested some years ago by the Local Govern-

ment Board's Inspector, Mr. Codrington, or whether some modification of the septic tank system is feasible; the latter would be probably the cheaper plan, but it would be necessary for your Council's Committee to obtain the opinion of some engineering expert as to its practicability, owing to the very slight fall of the ground from Gorseinon to the sea.

Cameron Place, Dock Street and Station Road in Loughor are still awaiting the drains which your Council two years ago resolved to provide.

Gowerton is the only village which possesses a proper sewer, and it must not be forgotten that even this is due not to your Council's initiative, but to that of Llanelly Rural District, of which Gowerton formerly constituted a part. Since Gowerton, however, came under your jurisdiction, the sewer has been greatly extended and improved, but an unnecessary amount of delay is shown in completing the system. It is gratifying to me to be able to report that the sewer was extended to Gurnos Street and Shaw Street during 1902, but it is absurd that some of the most important streets should still be destitute of drainage.

Rivers Pollution Prevention Act.

I can only repeat my statement of former years that as no system of drainage has been provided by your Council, pollution of every river and stream in the Llandilo-Talybont Division is inevitable, and that until sewers have been provided, it would be worse than useless to attempt to check river pollution.

Disposal of Refuse.

Owing to the inadequate supply of water in this division, the pail privy system is in general use. The pails are emptied weekly by scavenging contractors in all populous centres, and as their remuneration has been very greatly increased during the past two years, the work is very much better done now than formerly, though it is not yet so good as it ought to be. The emptying of pails is done with fair regularity, but the removal of household refuse is still very irregular indeed, and the pollution of soil and air resulting from heaps of decomposing filth

in the neighbourhood of dwelling-houses cannot but be prejudicial to the health of the inmates of those houses. Where gardens are large, regularity and frequency of removal are not so important, but in the case of small gardens in large villages frequent removal becomes an absolute necessity. The time has now arrived when your Council ought to consider whether it would not be true economy to have the scavenging done by scavengers in the direct employ of your Council, instead of continuing the present system of letting the work out by contract; that increased efficiency would follow the change of system there can be no reasonable doubt, for it is only by the unceasing vigilance of the sanitary inspectors, and an undue sacrifice of the inspectors' time that the contractors are kept up to even their present modest standard. Your Council in 1902 purchased two scavenging drums, which are used under the directions of your inspectors when the contractors have been particularly negligent, so that an experiment on the lines I have suggested would not entail much initial outlay. It is my pleasant duty to congratulate you on having during 1902 formed two additional scavenging districts, Loughor Borough and Penyrheol, a boon greatly appreciated by the inhabitants of those districts, and forming a great advance in sanitation.

Urban Powers.

Your Council applied to the Local Government Board for a grant of certain urban powers, and the Local Government Board last August issued an Order investing your Council with the following Urban Powers:—

I, In the whole of the district,

The Public Health Act, 1875, sections 39 and 50, section 169 second and third paragraphs, and section 170.

The Public Health Acts Amendment Act, 1890, section 23, (1), (2) and (4); and sections 25 and 33.

- II. In those contributory places in the district in which the provisions were not already in force.

The Public Health Act, 1875, sections 49, 112, 113, 114, 157 and 158.

Those new urban powers will be referred to in the later sections of this report dealing with those matters on which new powers have been granted, *e.g.*, buildings, slaughterhouses, etc.

Common Lodging Houses.

There is only one common lodging house in this division, as Swansea and Llanelly towns are within easy reach of most who wish to obtain lodging-house accommodation. The only common lodging-house of this division is well kept and in a satisfactory condition. New bye-laws are under the consideration of your Council now, and will probably come into force about April next.

Houses Let In Lodgings.

Owing to the rapid extension of industries in many parts of your district, the number of houses let in lodgings is large, probably considerably in excess of 200. Their condition is as a rule satisfactory, but will doubtless be still further improved after your new bye laws for houses let in lodgings come into force a few months hence.

Prevention of Nuisances.

Bye-laws for the prevention of nuisances are under consideration by your Council now, and will certainly, when they come into operation, produce a very marked improvement in the sanitary state of your district.

Housing of the Working Classes Acts.

During the past year 19 dwelling houses were reported as unfit for human habitation, and of these 6 have been closed, 5 demolished, and 8 rendered fit for habitation. In addition, one house reported unfit for habitation in 1901 was closed in 1902.

No case of overcrowding was discovered during the past year.

There is an adequate supply of houses for the working classes except in the neighbourhood of Gorseinon, where the rate of erection of new dwelling houses has not kept pace with the extension of the local industries.

According to the Surveyor's report (Table IX.) over 110 dwelling houses were erected in the Llandilo-Talybont Division during 1902.

Most of the houses have ample open space around them, but their surroundings can never be satisfactory as regards cleanliness, until your Council provides drainage and an adequate water supply, and also makes provision for more regular removal of household refuse.

The chief defects observed in the houses in this Division are that ill-ventilated and ill-lighted or unlighted stairs and passages are deplorably common; that dampness of houses is infinitely more frequent than it ought to be; and that very few yards are paved.

In my last annual report the following passage occurred :—
“The system of hurried perfunctory examination of plans by your Council is much to be deplored, and a small committee ought to be appointed for the purpose of making a preliminary examination of plans with the assistance of the Surveyor.” I am glad to be able to report that a Plans Committee now sits every month, and that the examination of plans is at last carried out in a satisfactory manner.

I regret, however, that no supervision is exercised over the erection of new houses, and that we have no guarantee that the houses are built according to the plans, and in conformity with your Bye-laws. At present the so-called supervision is little better than a farce. Some responsible officer should see for himself that your Bye-laws for new streets and buildings are not a mere dead letter, and if your present staff is not adequate to the work, the sooner your staff is increased the better.

A new code of Bye-laws for new streets and buildings is at present under the consideration of your Council, and by virtue of the new urban powers conferred on you in 1902 you will be able to make Bye-laws which will prevent improper alterations of houses, and will also enable you to insist upon the provision of back entrances for the removal of refuse, etc.

Factory and Workshop Acts.

The workshops and workplaces in the Llandilo-Talybont Division were kept well under observation during the past year, and their condition is very satisfactory. Eleven notices to lime-wash, cleanse or purify workshops were served during the past year, and also four notices to provide separate sanitary conveniences for the two sexes, and all those notices were duly complied with. One case of overcrowding was discovered by H. M. Inspector of Factories, the occupier of the workshop employing more persons during a period of overtime than his space allowed. The space fixed by law is 250 cubic feet per head during ordinary hours and 400 during any period of overtime, but there is no difficulty in any employer in this Division ascertaining at a glance whether there is overcrowding, for in each workroom is hung up a card signed by the Sanitary Inspector and myself containing amongst other information the following notice:—"Not more than persons may be employed at once in this room during ordinary hours, and not more than persons during any period of overtime," the exact numbers being filled in by the Sanitary Inspector or myself after careful measurement of the room. Mr. D. R. Thomas, your sanitary inspector, was called to give evidence for the prosecution, and a heavy fine was imposed.

In accordance with Section 109 of the Factory and Workshop Act, 1901, which forbids the making of wearing apparel in any dwelling house or building occupied therewith whilst any inmate of the dwelling house is suffering from scarlet fever, I closed six workshops in 1902. Two of those I closed for six weeks, but in the case of the other four, I removed the patients,

and only closed the workshops for a sufficiently long period to permit of disinfection.

No home work is performed in this Division except in places which come under the category of domestic workshops. There are no outworkers employed in connection with any of the workshops in this Division.

The following table shows the number of workshops and workplaces in this Division, and the nature of the industries carried on.

Nature of Industry.	Number of Workshops or Workplaces.	Number of persons engaged in the Workshops or Workplaces	Number of persons employed under the age of 18 years.
Millinery ...	7	17	11
Dressmaking ...	35	112	52
Tailoring ...	17	48	8
Shoemaking ...	18	27	10
Joinery ...	12	25	6
Cabinet-making .	1	2	1
Paint Mixing ...	11	18	0
Plumbing ...	1	1	0
Saddlery ...	2	2	0
Coachbuilding .	4	4	0
Weaving ...	4	17	0
Stocking making ...	3	3	0
Stone Cutting ...	4	6	0
Blacksmith ...	7	12	7
Quarries ...	14	33	0
Bakehouses ...	9	12	0
Total ...	149	339	95

The Bakehouses are dealt with separately in the next section.

Bakehouses.

The nine bakehouses situated in this division are all kept in a thoroughly clean and wholesome condition. The ventilation is good, and there are no drains, ashpits, or closets situated in or directly communicating with the bakehouses. There is no sleeping-place connected with any bakehouse, and underground bakehouses are unknown.

Lead-Poisoning.

One very marked case of lead-poisoning came under observation during the past year, but as the patient is a house-painter not employed in any workshop, the case did not come within the scope of the Factory and Workshop Act. The poisoning is doubtless to be attributed to the patient's omitting to cleanse his hands sufficiently thoroughly before partaking of meals.

Private Streets.

The so-called private streets of this division are most unreasonably numerous, and the condition of most of them is deplorable, and reflects great discredit on your Council both as a Sanitary Authority and as a Highway Board. There is no reason why you should not exercise the powers with which you have been for many years invested of compelling the owners, under Section 150 of the Public Health Act, 1875, to put them in a proper state of repair, and, after those streets have been put in a proper state, there is no reason why your Council should not declare most of those streets to be highways repairable by the community at large. It is a most absurd thing that plans for formation of new streets should be submitted to the Sanitary Authority, and that after the new streets have been constructed and maintained for twelve months, and application has been made to your Council to take them over as highways, your Highway Surveyor should report that they are not properly constructed, and recommend that your Council should not take them over. There seems to have been hitherto no co-ordination or consistency between the proceedings of the

Sanitary and Highway Departments of your work, and unfortunately the public have got to suffer, for the owners of those private streets get discouraged, and allow matters to drift from bad to worse. The discomfort to adult pedestrians using those private streets is very great indeed, but it is simply cruel to compel children of tender years to walk through pools of water and subsequently to sit for hours in school with damp feet.

As showing the reluctance of your Council to take over new streets, I beg to quote from my last year's report the following paragraph :—"The number of so-called private streets in this division is unreasonably great. Take, for instance, the village of Gorseinon, where, out of ten streets, only two are repairable by the community at large, and those two were highways repairable by the public long before there was any village of Gorseinon in existence. In other words, since the building of the thriving village of Gorseinon, with its steel works, its tinplate works, and its collieries, not a single new street has been taken over by the Highway Board. Surely the local ratepayers are entitled to better treatment than this. A similarly anomalous state of things exists in other villages. I have merely selected Gorseinon as a very striking example."

In the early part of 1902 my hopes rose high, for I believed that once your Council commenced to discuss the matter, definite steps would be taken to put things right. Unfortunately, however, with the exception of taking over 50 yards of Roger-street, Tirdeunaw, and serving notice on the owners of property in Glynllwchwr Road, Pontardulais, nothing has been done.

I trust that when my next annual report is submitted, I shall have a tale to tell of work accomplished, not merely dreamt of.

Sale of Food and Drugs Acts.

Through the kindness of Superintendent Menhinick of the County Constabulary, I am enabled to give the following statistics as to work performed under the above Acts in the Llandilo-Talybont Division during 1902 :—Five samples of butter, 5 of

lard, 23 of milk, 2 of pepper, 1 of vinegar, 5 of whisky, 2 of gin, and 1 of rum were taken for analysis, and all of these 44 were found unadulterated, with the exception of 6 samples of milk. The vendors of the adulterated milk were proceeded against before the magistrates, and all six were fined.

Dairies, Cowsheds and Milkshops Order.

The total number of cowsheds in the Llandilo-Talybont division is 312, of dairies 145, and of milkshops 6. The number of cows in cowsheds is 1,246. The sanitary condition of the cowsheds and dairies is fairly satisfactory, but when the new regulations which you are now considering come into force, still further improvements can be effected as to their ventilation, light, and drainage, and especially as to the provision of better rooms for the storage of milk.

Scarlet fever occurred in three dairies during the year, and it was found necessary to stop the sale of milk from each.

Slaughter-Houses.

Your Council in 1902 obtained from the Local Government Board urban powers so as to enable you to make much needed bye-laws for the regulation of slaughter-houses. Those bye-laws will probably come into operation about April next, and will enormously assist your officers in securing the cleanliness and the proper drainage, water supply and ventilation of the slaughter-houses. The total number of slaughter-houses in the Llandilo-Talybont division is 22, and their state has, with few exceptions, been always very unsatisfactory.

Under the new bye-laws, no slaughter-house can be used as such unless it is licensed and registered, and it will then be well nigh impossible for butchers to kill diseased animals on farms and in retired places, and afterwards convey the carcasses to Swansea for sale there, as is said to be done not infrequently now.

When all slaughter-houses in Swansea Rural District are registered, I believe it would be greatly to the benefit of Swan-

sea town, if the Swansea County Council arranged with your Council for the appointment of the Swansea Veterinary Surgeon as veterinary surgeon for your district at a merely nominal salary, as the dual appointment would greatly strengthen his hands, and give him a much greater and more real control over the meat supply of Swansea.

Offensive Trades.

Your Council have in the past year been invested by the Local Government Board with urban powers in regard to offensive trades, and Bye-laws are about to be adopted for their regulation. Tripe boiling is carried on in 12 places, bone boiling in 7, and offal boiling in 5, and owing to the primitive method in which they have been conducted, they have proved frequent sources of annoyance to the public.

Schools.

The sanitary conveniences of the various schools are fairly satisfactory except in Cadle Board School, which still possesses primitive privy cesspools. The objectionable cesspools at Tirdeunaw Board School were abolished in 1902, and the pail system adopted.

The proposed extension of the Gorseinon Joint Board School has been abandoned, and for the Loughor Borough School children presently attending Gorseinon School, the Loughor School Board have arranged to build a new school in Gorswaddan Road. Meantime some of the children continue as in 1901 to be taught in the Gorseinon Drill Hall, so as to relieve the congestion of the Mixed Department, but this arrangement is highly unsatisfactory from a sanitary point of view, and the unreasonably long delay in the provision of suitable premises ought to be at once terminated.

Burial Grounds.

None of the Burial Grounds in the Llandilo-Talybont Division are so situated relatively to wells as to contaminate the water supply.

The new Cemetery on Stafford Common, provided by the Gowerton Parish Council, has been completed for almost a year, but the public do not seem anxious to bury there (apparently because the fees are higher than in neighbouring burial grounds belonging to churches and chapels), and no interment has yet taken place in it.

The Llandilo Talybont Parish Council has applied for a loan to enable them to provide a cemetery between Pentre Farm and Pontardulais. A Local Government Board inquiry was held on 31st December, by Col. Durnford, R.E., and, as the result, a loan of £500 for the purchase of the ground has been sanctioned. The site is a good one from the sanitary point of view, as it will not endanger the public health, nor affect any sources of water supply.

Inspectors of Nuisances.

The two inspectors of nuisances have during 1902 as in all previous years discharged their arduous and responsible duties in a manner which is deserving of all praise, but it is impossible for a staff of only two inspectors to carry out satisfactorily the numerous and varied duties now imposed on them. In the last ten years the population has increased by over 6000, and the acreage has been greatly increased by the addition of the two parishes of Loughor Borough and Gowerton to this district at the end of 1894, and new duties have been imposed on sanitary inspectors under the Factory and Workshop Acts, yet the staff has remained exactly as it was. During the pressure of extra work entailed by the small-pox outbreak last July, your Council very kindly and wisely appointed a temporary assistant inspector, but I feel sure that a third permanent inspector ought to be appointed. And it must not be forgotten that if the Local Government Board sanction the much needed appointment of a third inspector, half the salary will be repaid by the County Council.

The following Table supplied by the inspectors shows the work done by them during the year, the figures in the first column referring to Mr. D. R. Thomas' district, and those in the second column to that portion of Mr. D. W. Morgan's district which is included in the Llandilo-Talybont Division.

TABLE X.—Statements by Sanitary Inspectors of Proceedings under the Public Health and other Acts. during 1902.

1st—NUISANCES.		
Complaints received.....	220	12
Informal notices served.....	203	118
Formal notices served by order of the Council..	16	2
No. of nuisances abated.....	219	114
2nd—WORKSHOPS AND WORKPLACES.		
No. on register.....	123	26
Inspections.....	150	104
Notices served to limewash, cleanse or purify..	9	2
Overcrowding discovered and abated.....	1	0
Notices to provide separate sanitary conveni- ences for the sexes.....	2	2
3rd—TENTS AND VANS.		
Inspections.....	8	8
No. of vans disinfected	0	0
4th—COMMON LODGING HOUSES.		
No. on register.....	1	0
Inspections.....	12	0
Cases of infectious disease reported to the Medical Officer.....	0	0
5th—HOUSES LET IN LODGINGS.		
No. registered.....	0	0
Inspections.....	180	15
Legal proceedings.....	0	0
6th—INFECTIOUS DISEASE.		
Visits of inquiry, etc.....	850	214
Patients removed to hospital.	3	0
Houses or premises disinfected.....	124	41
Sets of clothing, bedding, etc., disinfected....	14	41
Sets of clothing, bedding, etc., destroyed.....	9	1
Legal proceedings	0	0
7th—DAIRIES, COWSHEDS, AND MILKSHOPS.		
No. of dairies.....	75	70
No. of cowsheds.....	180	132
No. of milkshops.....	6	0
No. of cows in cowsheds.....	690	556
Inspections.....	175	290
Legal proceedings.....	0	0
Formal notices served by order of Council.....	5	0

TABLE X.—Continued.

8th—SLAUGHTER-HOUSES AND OFFENSIVE TRADES.		
No. of slaughter-houses.....	21	1
No. of other offensive trades.....	23	1
Inspections	156	8
Informal notices served.....	6	1
Formal notices served by Council's order.....	0	0
Legal proceedings.....	0	0
9th—UNSOUND FOOD.		
Inspections under Section 116, P.H.A. 1875...	104	18
Seizures of unsound food.....	0	0
Legal proceedings.....	0	0
10th—HOUSING OF THE WORKING CLASSES ACTS.		
Inspections of dwelling-houses.....	1470	208
No. reported unfit for habitation.....	15	4
No. of above closed.....	6	0
Do. repaired	5	3
Do. in process of repair.....	0	0
Do. demolished	4	1
Do. not yet attended to.....	0	0
Defective eaves, gutters, and downpipes made good.....	42	12
Defective drains.....	102	24
Privies repaired, provided, or converted to pail system after notice.....	240	26
Filthy houses cleansed after notice.....	8	4
11th—WATER SUPPLY.		
No. of samples taken for chemical analysis....	6	0
Do. do. bacteriological examination..	2	1

During the past year, I have from time to time made systematic inspections of my district.

Tables I—IV. prescribed by the Local Government Board are appended to this report, and are numbered XI—XIV., and in preparing these I have carefully complied with the directions given by the Local Government Board in the Notes to the various Tables.

I have the honour to be, Gentlemen,

Your obedient servant,

TRAFFORD MITCHELL.

Gorseinon, January, 1903.

TABLE XL.—Vital Statistics of the Llandilo-Talybont Division of the Swansea Rural District during 1902 and Previous Years.

YEAR.	Population estimated to Middle of each year.	BIRTHS		TOTAL DEATHS REGISTERED IN THE DIVISION.					TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DIVISION.					Deaths of Non-residents registered in Public Institutions beyond the Division.					NET DEATHS AT ALL AGES BELONGING TO THE DIVISION.	
		Rate*		Number	Under 1 Year of Age.	Rate per 1,000 Births registered.	Number	At all Ages	Rate.*	9	10	11	Number	Rate*	12	13				
		3	4														5	6	7	8
1	2	3	4	5	6	7	8	9	10	11	12	13								
1892	13620	494	36·3	62	125	202	14·8	..	..	5	207	15·2								
1893	13858	548	39·5	99	180	268	19·3	..	..	3	271	19·6								
1894	14075	505	35·9	81	160	252	17·8	..	..	1	253	18·0								
1895	18719	687	36·7	111	161	308	16·5	..	..	4	312	16·7								
1896	18918	659	34·8	84	127	268	14·2	..	..	2	270	14·3								
1897	19034	626	32·9	83	133	292	15·3	..	..	4	296	15·5								
1898	19228	605	31·5	81	134	283	14·7	..	..	2	285	14·8								
1899	19415	603	31·1	92	153	284	14·6	..	..	6	290	14·9								
1900	19630	587	29·9	83	141	287	14·6	..	..	9	296	15·1								
1901	19782	678	34·3	80	118	289	14·6	..	..	8	297	15·0								
Loughor Boro and Gowerdon.	4280	172	40·2	16	93	66	15·4	..	..	1	67	15·7								
	4346	158	36·4	24	152	79	18·2	..	..	1	80	18·4								
	4404	171	38·8	21	123	65	14·8	..	..	1	66	15·0								
Averages for years 1892-1901.	18931	649	34·3	92	141	294	15·5	—	..	5	299	15·8								
1902	20090	646	32·2	80	124	299	14·9	..	..	10	309	15·4								

* Rates in Columns 4, 8, and 13 calculated on 1,000 of estimated population.

NOTE.—The deaths to be included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10, and the addition of the number in Column 11.

By the term "Non-Residents" is meant persons brought into the division on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the division on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" to be taken into account for the purposes of these tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums. The following are the Public Institutions from which death returns have been received: Swansea General Hospital, Swansea Fever Hospital, Swansea Workhouse, Bridgend Lunatic Asylum, Carmarthen Lunatic Asylum, Llanelly Workhouse, Llanelly General Hospital, and Cyma Fever Hospital. There are no Public Institutions situated in this division into which persons are received on account of sickness or infirmity, except the Garngoch Small-pox Hospital erected in 1902. The Cottage Homes for the pauper children of the Swansea Union are situated in the Swansea Higher portion of Cockett Parish, but, as the children are not received there on account of sickness or infirmity, it is not a Public Institution according to the above definition; therefore I do not exclude the single death that occurred there in 1902.

In the above table, in order to make the statistics complete, I have inserted the figures for 1892-94 for Loughor Borough and Gowerdon, two parishes which were formerly in the Llanelly Rural District, but which were transferred to the Llandilo-Talybont Division on 1st January, 1895. Area of district in acres (exclusive of area covered by water), 21,313.

At census of 1901:—Total population at all ages, 19,782; number of inhabited houses, 3,968; average number of persons per house, 4·98.

TABLE XII.—Llandilo-Talybont Division of Swansea Rural District.

NAMES OF LOCALITIES.	PARISH OF LLANDILO-TALYBONT.				PARISH OF PENDERY.				SWANSEA HIGHER (Portion of Cockett Parish).				SWANSEA LOWER (Portion of Cockett Parish).				PARISH OF LOUGHOR BOROUGH.				PARISH OF GOWERTON.			
	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
YEAR.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.
1892 ..	4764	157	73	24	2720	101	41	14	4085	169	64	18	2051	67	29	6	2110	77	26	9	2170	95	41	7
1893 ..	4928	174	101	39	2780	100	47	20	4100	204	85	31	2050	70	38	9	2156	86	44	15	2190	72	36	9
1894 ..	5095	194	89	29	2830	109	58	18	4100	143	72	29	2050	59	34	5	2210	87	27	8	2194	84	39	13
1895 ..	5240	220	91	34	2871	105	50	24	4100	158	74	26	2050	55	19	4	2260	79	49	16	2198	70	29	7
1896 ..	5360	185	86	35	2910	112	41	13	4100	132	53	10	2050	49	23	6	2300	96	32	9	2198	85	35	11
1897 ..	5450	165	79	30	2900	99	46	11	4100	146	72	19	2045	58	16	0	2341	88	53	18	2198	70	30	5
1898 ..	5590	189	110	36	2900	76	36	8	4100	130	46	13	2040	61	30	5	2390	82	37	12	2208	67	26	7
1899 ..	5720	177	80	23	2900	91	37	16	4100	122	72	21	2030	50	32	10	2440	97	35	10	2225	66	34	12
1900 ..	5887	164	84	26	2898	78	50	14	4102	116	68	19	2030	60	22	6	2488	94	45	14	2225	75	27	4
1901 ..	5994	223	81	25	2882	94	37	10	4102	149	69	18	2023	52	39	9	2543	99	38	11	2238	61	33	7
Averages of Years 1892 to 1901	5403	185	87	30	2859	97	44	15	4099	147	68	20	2042	58	28	6	2324	89	39	12	2204	75	33	8
1902 ..	6190	207	106	34	2901	83	45	17	4100	130	70	13	2020	54	30	4	2630	94	36	7	2250	78	22	5

Deaths of residents occurring in public institutions beyond the division are included in sub-columns *e* of this table, and those of non-residents registered in public institutions in the division excluded.
(See note on Table XI. as to meaning of terms "resident" and "non-resident.")

Deaths of residents occurring in public institutions, whether within or without the division, are allotted to the respective localities according to the addresses of the deceased.

TABLE XIII.—Llandilo-Talybont Division of the Swansea Rural District.—Cases of Infectious Disease notified during the year 1902.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DIVISION.							TOTAL CASES NOTIFIED IN EACH LOCALITY.						NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.					
	At all Ages.	At Ages—Years.						1 Parish of Llandilo Talybont	2 Parish of Penderry	3 Swansea Higher (portion of C'kett Parish).	4 Swansea Lower (portion of C'kett Parish).	5 Parish of Llonghor Borough	6 Parish of Gow'ton	1 Parish of Llandilo-Talybont	2 Parish of Penderry	3 Swansea Higher (portion of Cockett Parish).	4 Swansea Lower (portion of Cockett Parish)	5 Parish of Llonghor Borough	6 Parish of Gow'ton
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and up'ads												
Small-pox ..	3	..	..	..	..	3	..	1	H	..	2	..	..	1	..	..	2	..	..
Cholera ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria ..	12	..	6	3	2	1	..	1	..	8	..	2	1	..	..	..	..	..	..
Membranous croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	9	..	2	..	1	6	..	3	1	4	..	1	..	..	..	..	..	..	..
Scarlet fever ..	176	3	52	108	9	4	..	66	42	40	4	12	12	..	..	..	..	..	..
Typhus fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enterio fever..	12	..	..	2	2	8	..	2	1	2	3	..	4	..	..	..	..	..	..
Relapsing fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever	5	..	..	..	2	3	..	2	..	2	..	1	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	217	3	60	113	16	25	—	75	44	56	9	16	17	1	..	—	2	—	..

Isolation Hospitals—Swansea Fever Hospital in Swansea Town, and Garngoch Small-pox Hospital in the Llandilo-Talybont Division.

TABLE XIV.—Llandilo-Talybont Division of the Swansea Rural District—Causes of, and ages at, Death during year 1902.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DIVISION AT SUBJOINED AGES.							DEATHS IN OR BELONGING TO LOCALITIES (AT ALL AGES).						
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Parish of Llandilo-Talybont.	Parish of Pendery.	Swansea Higher portion of Cockett parish.	Swansea Lower portion of Cockett parish.	Parish of Loughor Borough.	Parish of Gowerdon.	
Small-pox	1	..	..	..	..	1	..	1	..	..	..	..	..	
Measles	..	..	..	..	..	..	..	..	..	..	..	..	..	
Scarlet Fever	3	..	2	1	..	..	..	2	1	..	..	..	..	
Whooping Cough	6	4	2	..	..	..	..	6	..	..	..	..	..	
Diphtheria and Membranous Croup	1	..	1	..	..	..	..	..	..	1	..	..	..	
Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	
Fever { Typhus	..	..	..	..	..	..	..	..	..	..	..	..	..	
Enteric	4	..	..	..	1	2	1	1	1	2	..	..	..	
Other continued	..	..	..	..	..	..	..	..	..	..	..	..	..	
Epidemic influenza	7	..	..	..	1	5	1	2	2	1	2	..	..	
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diarrhoea	2	2	..	..	..	..	..	1	..	..	1	..	..	
Enteritis	1	1	..	..	..	..	..	..	..	1	..	..	..	
Puerperal Fever	1	..	..	..	..	1	..	..	..	1	..	..	..	
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	
Other Septic Diseases	3	..	..	..	..	1	2	1	..	..	1	1	..	
Phthisis	34	..	..	1	11	22	..	10	5	10	1	7	1	
Other Tubercular Diseases	11	5	2	2	..	2	..	5	1	3	..	2	..	
Cancer, Malignant Disease	11	..	..	..	1	8	2	2	..	2	3	1	3	
Bronchitis	15	3	2	..	..	3	7	7	4	4	..	..	..	
Pneumonia	23	6	3	..	2	8	4	7	5	4	3	2	2	
Pleurisy	1	..	..	..	1	..	..	1	..	..	..	..	..	
Other Diseases of Respiratory Organs	6	..	1	..	..	4	1	2	1	1	2	..	..	
Alcoholism	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cirrhosis of Liver }	3	..	..	..	..	3	..	..	..	..	..	1	2	
Veneral Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	
Premature Birth	3	3	..	..	..	..	..	1	1	1	..	..	..	
Diseases and Accidents of Parturition	10	..	..	..	..	10	..	..	..	4	4	1	1	
Heart Diseases	29	..	..	6	3	14	6	9	4	4	1	6	5	
Accidents	17	1	2	1	3	9	1	3	1	9	3	1	..	
Suicides	1	..	..	..	..	1	..	1	..	..	..	..	..	
All Other Causes	116	55	4	1	3	26	27	44	19	22	9	14	8	
All Causes	309	80	19	12	26	120	52	106	45	70	30	36	22	

All deaths of "Residents" occurring in public institutions beyond the Division are included in the above Table, and those of "Non-Residents" occurring in public institutions within the Division are excluded. (For definitions of these terms see notes on Table XI.)

